

*CAREX FISSA*, SECTION *MULTIFLORAE* (CYPERACEAE), NEW TO  
TEXAS

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ABSTRACT

*Carex fissa* Mackenzie, Section *Multiflorae* (Cyperaceae), previously unreported in Texas, which resembles *C. annectens* (Bickn.) Bickn. has been found in several Texas counties: Austin, Colorado, Franklin, Hopkins, Galveston, and Raines.

KEY WORDS: *Carex fissa*, *Carex* section *Multiflorae*. Cyperaceae, Texas.

*Carex* section *Multiflorae* Kunth is represented by thirteen species in the temperate and warmer parts of North America; by a number of species in eastern Asia, and by two in South America (Mackenzie 1931). Four species of section *Multiflorae* are now found in Texas: *Carex annectens* (Bickn.) Bickn., *C. fissa* Mackenzie, *C. triangularis* Boeck., and *C. vulpinoidea* Michaux. *Carex annectens* and *C. triangularis* were treated by Correll & Johnston (1970) under *C. vulpinoidea*. Correll & Johnston (1970), Correll & Correll (1972), Gould (1975), Mahler (1988), nor Johnston (1988) have listed *Carex fissa* as occurring in Texas.

*Carex fissa*, a southeastern species, was first described from Sapulpa, in eastern Oklahoma (Mackenzie 1931) where it was believed to be an endemic. Since Hermann (1965) described *Carex fissa* var. *aristata* Hermann from north central Florida, *Carex fissa* has been found throughout the Gulf States. The habitat in Texas is similar to what Godfrey & Wooten (1979) described for *Carex fissa* var. *aristata* in north and north central Florida; wet woodlands, pine flatwoods, wet clearings, and ditches. This treatment does not recognize varieties. However, if the reader is interested, Hermann (1965) provides a key to separate varieties as seen by him. The following key will help differentiate the closely related taxa of section *Multiflorae* found in Texas.

KEY TO TEXAS SECTION *MULTIFLORAE*

1. Most leaves equal to or exceeding the culms; perigynia 1.0-1.8 mm broad, narrowly ovate; beak of the perigynium tapering from the body, beak 1/2 as long as the body to as long as body ..... *C. vulpinoidea*
- 1' Most leaves shorter than the culms; perigynia 1.6-3.0 mm broad, narrowly ovate to broadly ovate, orbicular to reniform; beak of the perigynium tapering or arising abruptly from the body, beak to 1/2 the length of the body ..... 2
2. Perigynia very conspicuous in the infructescence; perigynia 2.4-3.0 mm broad, orbicular to reniform, often broader than long, with red glandular dots; beak of perigynium arising abruptly from the body; perigynial scales not conspicuous; apex of membranous inner band of the upper leaves somewhat thickened, prolonged and usually sharply rounded ..... *C. triangularis*
- 2' Perigynia conspicuous or not in the infructescence; perigynia 1.6-2.7 mm broad, narrowly ovate to ovate orbicular, rarely broader than long, with or without red glandular dots; beak of perigynium tapering or arising abruptly from the body; perigynial scales usually conspicuous; apex of membranous inner band of the upper leaves somewhat thickened or not, prolonged and slightly rounded ..... 3
3. Base of culms 2.5-3.0(-4.5) mm thick; rhizomes not elongate; perigynia 1.6-2.4 mm broad, occasionally with red glandular dots apically; beak of perigynium usually arising abruptly from body, (infrequently tapering); apex of the membranous inner band of the upper leaves somewhat thickened ... *C. annectens*
- 3' Base of culms (3.0-)3.5-6.0 mm thick; rhizomes elongate; perigynia 2.0-2.7 mm broad, never with red glandular dots; beak of perigynium usually tapering from body, (infrequently arising abruptly); apex of the membranous inner band of the upper leaves friable, not thickened ..... *C. fissa*

Specimens collected: UNITED STATES. Texas: Franklin Co., 9.2 miles (14.7 kilometers) N on Hwy 37 from its jct. with Hwy 196, N of Mt. Vernon, 15 May 1989, S. & G. Jones 2852 & Tim Powell (ASTC, MICH, TAES). It was frequent in open wet areas adjacent to White Oak Creek. Associated species: *Carex amphibola* Steud., *C. lupulina* Muhl., *C. crus-corvi* Kunze, *C. arkansana* Bailey, *C. annectens*, *C. typhina* Michaux, *C. bushii* Mackenzie, *C. reniformis* (Bailey) Small, *Iris brevicaulis* Rafinesque, *Danthonia spicata* (L.) Beauv., *Lolium perenne* L., *Stipa leucotricha* Trin. & Rupr., *Asclepias amplexicaulis*

Small, and *A. viridis* Walt. Galveston Co., Pelican Island, 4.2 miles (6.7 kilometers) E on main road through Pelican Island from its jct. with Port Ind. Blvd., 08 May 1989, S. Jones 2718 & J. Wipff (ASTC, MICH, SMU, SRSU, SWT, TAES, WARM). It was occasional in an open hydric roadside ditch. Associated species: *Carex triangularis*, *C. brittoniana* Bailey, *C. cherokeensis* Schwein., *C. crus-corvi*, *C. leavenworthii* Dew., *C. amphibola*, *Eleocharis albida* Torrey, *Scirpus maritimus* L., *Asclepias perennis* Walt., *Spartina spartinae* (Trin.) Hitchc., *Setaria geniculata* (Lam.) Beauv., and *Tamarix* sp. Raines Co., South side of Lake Fork Reservoir at the lake's crossing of FR 2946, 13 May 1989, S. & G. Jones 2839 (ASTC, MICH, TAES). It was frequent around the mesic to hydric lakeside in red clayey soil. Associated species *Carex crus-corvi*, *C. hyalinolepis* Steud., *Carex flaccosperma* Dew., *Scirpus pendulus*, *Eleocharis* sp., and *Juncus* spp.

Additional specimens: UNITED STATES. Texas: Austin Co., 8 April 1939, B. Tharp 43279 (TEX). Colorado Co., 03 May 1948, E. Whitehouse 19871 (SMU). Gregg Co., 20 April, 1988, E. Nizon 16568 (ASTC, TAES). Hopkins Co., 08 June 1953, L. Shinnars 15037 (SMU); 05 June 1989, A.A. Reznicek 8484 & R.F.C. Naczi (MICH, TAES).

A careful examination of *Carex* section *Multiflorae* specimens in other herbaria should yield additional Texas specimens.

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